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**GB 2014603 A GB 1539167 A GB 1463353 A
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(54) **Stain removing composition**

(57) The composition comprises an amine salt of a sulphonated alkyl benzene dissolved in a hydrocarbon solvent. The amine salt may be an iso-propylamine salt of a sulphonated dodecyl benzene and the solvent may be a kerosene. The composition is useful against both oil based and water based stains.

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STAIN REMOVING COMPOSITION

The present invention relates to a stain removing composition.

There are many applications where a stain removing composition is required. These range from accidental spillages of liquids onto, say, a carpet to the need to remove soiling which has built up on an article as a result of prolonged use.

Existing stain removing compositions suffer from a number of disadvantages. In particular, they may not be effective for fully removing the stain, and moreover they may not be effective against both aqueous and non-aqueous based stains.

It is an object of the present invention to obviate or mitigate the abovementioned disadvantages.

According to the present invention there is provided a liquid stain removing composition which comprises a hydrocarbon solvent having dissolved therein an amine salt of a sulphonated alkyl benzene.

Preferably the hydrocarbon solvent comprises 80 to 95% by volume of the composition. Preferably this solvent is a kerosene (particularly an odourless kerosene), but other hydrocarbon solvents may be used, for example liquid paraffin, petroleum ether, and petrol. The amine salt acts as a surface active agent and is most preferably an alkylamine salt. The preferred surfactant for use in the invention is a iso-propylamine salt, most particularly the iso-propylamine salt of a sulphonated salt dodecyl benzene. This surface active agent is available from Albright & Wilson under the designation NANSA YS 94 which is approximately 95% aqueous solution of the surfactant in water. The use of such an aqueous solution in the formulation of the invention is perfectly acceptable. In particular, the formulation

may contain 5 to 20% by volume of a 90-95% aqueous solution of the surfactant.

The formulation may contain minor amounts of incidental ingredients, eg. 0.3-1.5% lanolin together with colouring agents and/or perfumes (eg. a maximum of 0.5% each).

The formulations in accordance with the invention may be applied to the stain by means of a cloth. The formulations are effective for removing a wide range of stains, and will find particular utility in removing soiling (eg. grease based) from various articles, eg. of plastics material.

The invention will be further described by reference to the following non-limiting Examples.

Example

A stain removing composition was prepared with the following composition:

Kerosene	89.5%
NANSA YS 94	10%
Lanolin	0.4%
Colouring Agent	0.05%
Odourant	0.05%

This formulation was found to be useful for both oil based stains and water based stains, and was found to be particularly efficient in softening and removing chewing gum from fabrics. The formulation can be used for removing organic stains from a variety of surfaces providing the stain is not fixed. All stains can be rinsed off with water after treatment with the stain remover.

Tests have further indicated that tar, diesel oil, carbon and paint can be removed from clothing by

use of the composition.

Tests have indicated that the composition is of higher efficiency than commercially available products, such as water based stain removers and oil based stain removers.

The composition is not harmful provided that the usual precautions relating to surfactants and hydrocarbons are observed.

CLAIMS

1. A liquid stain removing composition which comprises a hydrocarbon solvent having dissolved therein an amine salt of a sulphonated alkyl benzene.
2. A composition as claimed in Claim 1 wherein the hydrocarbon solvent comprises 80-95% by volume of the composition.
3. A composition as claimed in Claims 1 or 2 wherein the solvent is a kerosene.
4. A composition as claimed in Claim 3 wherein the solvent is an odourless kerosene.
5. A composition as claimed in any one of Claims 1 to 4 wherein said salt is an alkylamine salt.
6. A composition as claimed in Claim 5 wherein the alkylamine salt is an iso-propylamine salt.
7. A composition as claimed in Claim 6 wherein the salt is the iso-propylamine salt of a sulphonated dodecyl benzene.
8. A composition as claimed in any one of the preceding claims containing 0.3 to 1.5% lanolin.
9. A composition as claimed in any one of the preceding claims including colouring agents and/or perfumes.
10. A liquid stain removing composition which comprises 80 to 95% by volume of the composition of kerosene having dissolved therein an iso-propylamine salt of a sulphonated alkyl benzene.